

Appl. No. : 09/937,365
Filed : January 18, 2002

REMARKS

Claim 1 has been amended to clarify the invention. Support for the amendment to Claim 1 can be found throughout the specification. Claims 7-9 and 23 have been canceled without prejudice. Claims 24-42 have been added. Support for the new claims can be found in the existing claims, for example. Claims 10, 12 and 15 have been amended to depend on Claim 24. The amendments do not constitute the addition of new matter to the application. Applicant respectfully requests entry of the amendments and reconsideration of the application in view of the amendments and the following remarks.

Rejection of Claims 1 and 7-22 Under 35 U.S.C. § 112

Claims 1 and 7-22 have been rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for the "treatment of type I allergies", does not reasonably provide enablement for "prevention of type I allergies". Applicant respectfully traverses this rejection. Claims 7-9 have been canceled without prejudice. Claims 10-15 have been amended to depend on new independent Claim 24. Thus, the rejection of Claims 10-15 is moot. Claims 16-22 are dependent ultimately on Claim 1 as amended herein. Claim 1 and the claims dependent thereon could not be rejected under § 112, first paragraph as explained below.

Claim 1 as amended herein recites a composition for preventing or treating type I allergy selected from atopic dermatitis and pollonosis, comprising kaempferol-3-glucoside (astragalin) in an amount effective to prevent or treat type I allergy selected from atopic dermatitis and pollonosis.

As to a composition for preventing pollonosis, in Experimental Example 5 on pages 28-29 of the specification, thirteen volunteers who had previously experienced pollinosis were asked to drink 240 µg of astragalin dissolved in a suitable amount of water or hot water twice a day starting 14 days before the start of the pollen season and ending 14 days after the start of the pollen season. As a result, the composition of the present invention was proved to be effective for preventing pollonosis as a product itself.

As to a composition for preventing atopic dermatitis, in Experimental Example 3 on pages 24-26 of the specification, the mice of astragalin-administered group were allowed to take astragalin containing diet before the symptoms of atopic dermatitis (such as inflammation and scratch wound) were seen in the control group. In addition, the serum IgE level kept low

throughout the experiment in the mice of astragalin-administered group while the serum IgE level rose gradually with age in control mice (see Fig. 4).

From the above results, the ingestion of astragalin suppresses the serum IgE level thereby inhibiting the development of atopic dermatitis. As a result, the composition of the present invention was proved to be effective for preventing atopic dermatitis as a product itself.

Thus, the specification reasonably provides enablement for a composition for “prevention of atopic dermatitis or pollonosis.” Thus, it is respectfully submitted that the rejection should be withdrawn.

Rejection of Claims 1 and 7-23 Under 35 U.S.C. § 103

Claims 1 and 7-23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over H. Fukumoto et al. in combination with Sawruk (US 5,478,579). Applicant respectfully traverses this rejection. Claims 7-9 and 23 have been canceled without prejudice. Claims 10-15 have been amended to depend on new independent Claim 24. Thus, the rejection of Claims 10-15 is moot. Claims 16-22 are dependent ultimately on Claim 1 as amended herein. Claim 1 and the claims dependent thereon could not be obvious over the references as explained below.

Claim 1 has been amended to recite a composition for preventing or treating atopic dermatitis or pollonosis. The present invention is particularly effective for atopic dermatitis or pollinosis.

H. Fukumoto et al. discloses “kaempferol-3-glucoside (7) have been reported to inhibit the release of IgE-promoted histamine from mast cells” (see page 205, right column, lines 4-8) and flavonol glycosides’ antiallergic activities. Further, H. Fukumoto et al. discloses an anti-anaphylactic effect of astragalin. However, H. Fukumoto et al. does not teach or even suggest atopic dermatitis or pollinosis.

Anaphylaxis, atopic dermatitis and pollinosis belong to the type I allergy classification. Anaphylaxis is an acute and severe disease, while atopic dermatitis and pollinosis are chronic diseases. Thus, the development mechanisms of these diseases are different.

Sawruk discloses a method for orally inducing and enhancing the absorption of calcium into mammalian bone tissue comprising the administration of an effective dose of a flavonol aglycone glycoside in combination with nutritional calcium. However, Sawruk does not teach or even suggest atopic dermatitis or pollonosis.

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Thus, a combination of H. Fukumoto et al. and Sawruk could not lead to the present invention. Thus, the claims could not be obvious over the references. Applicant respectfully requests withdrawal of this rejection.

New Claims 24-42

Claims 24, 25, 31 and 37 are independent and the remaining claims are ultimately dependent on either one of Claims 25, 31 and 37. Claims 10-15 have been amended to depend on Claim 24.

Claim 24 recites a method for treating pollinosis in a subject, comprising: administering to a subject who suffers from pollinosis an effective amount of kaempferol-3-glucoside to treat pollinosis.

As discussed above, neither H. Fukumoto et al. nor Sawruk teaches pollinosis. Thus, it is respectfully requested that Claim 24 and the claims dependent thereon be allowed.

Claim 25 recites a method for preventing pollinosis in a subject, comprising: administering to a subject who previously experienced pollinosis and expects to suffer from pollinosis in a specific season an effective amount of kaempferol-3-glucoside to prevent pollinosis, prior to the season; and continue administering to the subject an effective amount of kaempferol-3-glucoside to prevent pollinosis until the season is over.

For the same reason as discussed above regarding the rejection of Claim 1 under § 112, the specification reasonably provides enablement for “prevention of pollinosis.” Further, neither H. Fukumoto et al. nor Sawruk teaches pollinosis. Thus, it is respectfully requested that Claim 25 and the claims dependent thereon be allowed.

Claim 31 recites a method for treating atopic dermatitis in a subject, comprising: administering to a subject with high serum IgE level who suffers from atopic dermatitis an effective amount of kaempferol-3-glucoside to treat the atopic dermatitis.

As discussed above, neither H. Fukumoto et al. nor Sawruk teaches atopic dermatitis. Thus, it is respectfully requested that Claim 31 and the claims dependent thereon be allowed.

Claim 37 recites a method for preventing atopic dermatitis in a subject, comprising: administering to a subject with high serum IgE level who suffers from atopic dermatitis an effective amount of kaempferol-3-glucoside before showing symptoms thereof to prevent the atopic dermatitis.

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For the same reason as discussed above regarding the rejection of Claim 1 under § 112, the specification reasonably provides enablement for "prevention of atopic dermatitis." Further, neither H. Fukumoto et al. nor Sawruk teaches atopic dermatitis. Thus, it is respectfully requested that Claim 37 and the claims dependent thereon be allowed.

CONCLUSION

In light of the Applicant's amendments to the claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.


Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: January 26, 2004

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